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Soumyananda Dinda

University of Burdwan, India

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Interrelationships between Social and human Capital, and Economic Growth[Ψ]

SoumyanandaDinda

Department of Economics, University of Burdwan, India

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Abstract

This study focuses on economic growth and explains the interaction mechanism of economic agents and their relations. This paper highlights human capital and its social aspects. It also shows some critical aspect in the process of economic growth through interaction of socio- economic factors, which are considered as investment for creation of human capital. This investment includes cost of time and effort, which actually build up social fabric and human knowledge and health capital, which in turn creates economic growth. Root of economic growth actually depends on human capital under social relations.

Keywords: Social Capital, Human Capital, Trust, Social structure, Norms, Regulation, Economic Growth, Social Capital Formation, Health Capital, Bonding Social Capital, Linking capital,

1. Introduction

The classical economists identified land, labour and physical capital as three basic factors shaping economic growth. Traditionally economic literature has focused more on human capital or labour and physical capital as key determinants of economic growth; theoretical and empirical literature has examined these relationships (Solow 1956, 1957, Lucas 1988, Barro and Sala-i-Martin 1995). The focus on these types of capital often overlooks critical aspect in the process of economic growth and more specifically earlier literature does not explain the interaction mechanism of economic agents and their relations. The study of determining factors of economic growth in the literature mainly focuses on relative stock of *economic factors* like physical capital, infrastructure, technology, etc. however ignores *social factors*. Recently a growing body of research significantly recognizes *social factors* such as culture, social norms and regulations, which act as pivotal role for promotion of economic growth and development (Dinda 2008, 2014). Economists have identified the missing link in the growth process which is social relation and culture. Several studies investigated the impact of social culture, which includes social structure based on trustworthiness, norms, regulation, cooperation and networks. All these lead to develop a new concept - *social capital*, which has a long history in the social sciences. Bourdieu (1980, 1986), Coleman (1988, 1990) and Putnam (1993, 1995, 2000) are credited for introducing the concept of social capital[1] and popularized it making relevance in this globalized market economy.Social capital is an attractive idea and it plays an important role in economic performances. What is the development mechanics behind it? This study attempts to make sense of the burgeoning social capital literature, and to ascertain its usefulness as a basis for incorporating *the social dimension* into serious discussions of economic growth and development mechanics. This study provides both an overview of the scholarship on social capital for those unfamiliar with the term, and also reviews the relationship between social capital and economic growth through development of human health capital. This chapter reviews the basic relational dynamics between social capital and economic growth, and also traces out the possible channels through which social capital promotes economic prosperity.

This study is organized as follows: Section 2 defines and overviews social capital. Section 3 describes the formation of social capital in the channel of human capital formation. Section 4 briefly reviews the role of human capital in economic growth. Section 5 discusses the interrelationships between social and human capital, and economic growth.Section 6 critically reviews it, and finally, Section 7 concludes with remarks.

2. Social Capital

The **concept of social capital** evolves over time and it has been defined in several ways. Bourdieu (1986) defines social capital as the capital of 'social connections, mutual acquaintance and social recognition'. Coleman (1988) indicates all those features of the social structure that might facilitate actions of individuals within the social structure itself[2]. Coleman (1990) defines social capital: '….social organization constitutes social capital, facilitating the achievement of goals that could not be achieved in its absence or could be

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[1] See also Lin 2001; Ostrom 2000; Cohen and Prusak 2001; Rose 2000; Bertrand and Mullainathan 2000; Beugelsdijk and Smulders 2004; Glaeser et al. 2000; Knack et al. 1997; Tau 2003; etc.

[2] For instance, parental care may be seen as a social norm that facilitates children's subsequent activity and success in society; social relationships per se are a form of social capital as they establish obligations, expectations and trustworthiness.

achieved only at a higher cost.' Putnam et al. (1993) provides similar characterization referring to 'features of social organization, such as trust, norms, and networks that can improve the efficiency of society by facilitating coordinated actions.' Putnam (2000) introduces the idea of social capital in terms of relations or interdependence between individuals: '…social capital refers to connections among individuals – social networks and the norms of reciprocity and trustworthiness that arise from them.' Fukuyama (1995) argues that only certain shared norms and values should be regarded as social capital. '…Social capital can be defined simply as the existence of a certain set of informal rules or norms shared among members of a group that permits cooperation among them. … The norms that produce social capital ..must substantively include .. meeting of obligations, and reciprocity.' 'Social capital may be defined operationally as resources embedded in social networks and accessed and used by actors for actions' (Lin 2001). So, the concept of social capital has two important components: (i) it represents resources embedded in social relations rather than individuals, and (ii) access and use of such resources reside with actors. Thus, social capital creates a common platform in which individuals can use membership and networks to secure benefits[3]. Social capital is the shared knowledge, understanding, norms, rules and expectations about patterns of interactions that groups of individuals bring to a recurrent activity (Ostrom 2000). Thus, social capital can be considered as the stock of active connections among individuals - the trust, mutual understanding, and shared values and behaviours that bind the members of human networks and make possible cooperative action (Cohen and Prusak 2001). The World Bank (2011) has adopted a definition of social capital very close to that of Putnam and colleagues: 'Social capital …..is the glue that holds them together'.

The various definitions of social capital are identified in literature stem from specific nature of social capital and the complexity of its conceptualization. Social capital is multidimensional and must be conceptualized as such to have any explanatory value (Eastis 1998). Social capital is about the value of social networks, *bonding* with similar people and *bridging* between diverse people, with norms of reciprocity (Dekker and Uslaner 2001; Uslaner 2001). Social capital is fundamentally about how people interact with each other (Dekker and Uslaner 2001).

From the evolution of definition of social capital it is clear that initially the social organization is considered as social capital, 'facilitating the achievement of goals' (Coleman

[3] Individuals are engaged in repeated interactions with others and everyday business, thereby, social transactions are less costly.

1990). Putnam et al. (1993) emphasises on the *efficiency of society* highlighting 'the features of social organization'. In their view, truly social capital is a positive group externality that arises from social organization/institution in certain form of norms and values that realise 'the meeting of obligation and reciprocity' (Fukuyama 1995). Social capital is the network of objective relationships that people and organizations have, and subjective relationships that linked to norms and trust in other people and organizations. At individual level social capital refers to a system of interpersonal networks (Dasgupta 2002), which enhances cooperation and collaboration that ensure 'the norms of reciprocity and trustworthiness' (Putnam 2000) that helps also to create the economic opportunities. Thus, social capital creates a common platform in which individuals can use membership and networks to secure benefits from their interactions and 'recurrent activity' (Ostrom 2000). Social capital is a broad term containing the social networks and norms that generate shared understandings, trust and reciprocity, which underpin cooperation and collective action for mutual benefits, and creates the base for economic prosperity (Dinda 2008).

Two major concepts evolvingrelated to social capital are culture and institutions. Culture is *shared values and beliefs* (Casson& Godley 2000). North's (1990) view is that institutions may be formal (like rules) or informal (like norms of behaviour). In North's opinion, institutions are the rules of the game and organizations (government, enterprises and other organizations) are the players. Thus, both '*culture*' and '*institutions*' include values and norms, but not networks, which belong to the organizations (North 1990).

In this context, social capital can be defined as social, non-formalized networks that are filled by networks' nodes (actors) with norms, values, preferences and other social attributes and characteristics. Truly here, social capital is considered as a type of infrastructure with nodes and links[4]. The nodes consist of individuals and organizations, which establish links between each other. Institutions, social relationships, networks and norms shape the quality and quantity of a society's social interactions (World Bank 2003).

Social capital exists as a resource to action, emerging in engagement or in networking system. Focus of the concept of social capital of Bourdieu, Coleman and Putnam is the location of social capital as residing, belonging and existing in the relational bonds of human society. This socialness is the medium in which social capital exists, operates, strengthens or diminishes. Social capital can only exist within a pattern of relationships.

[4]The construction of links is governed by the individuals'/organizations' norms, preferences and attitudes, which can thus prevent emergence of links between individualsor organizations as well. In the links, different types of information are distributed between the nodes.

These relational structures may vary in duration, density, distance and interconnectedness; however social capital is intrinsic to relational network that should have emotional and perceptual consequences. This is the oxygen of social capital, which provides either a potentially rich environment for growth or limiting sense.

Social capital can be divided into two parts: civil and governmental social capital. At micro level, civil social capital relates to values, beliefs, attitudes and norms of behaviour which are observed 'strong ties' or 'bonds' in family members, close friends, colleagues; 'weak ties' or 'bridges' with more distant associates and acquaintances, and 'linkages' with resources (Woolcock 2000). At macro level, governmental social capital relates to the 'rule of law', 'contract enforcement', 'efficient administrative system' which are the 'state capability and credibility' (Meier 2002).

The absence of constructive interaction between the micro- and macro-levels can result in a significant breakdown of trust – one of the most important and most widely discussed elements of social capital. Building on Coleman's concept, *Francis Fukuyama* argues for corporations for achieving economic success. *Fukuyama (1995)* emphasizes the necessity of trust, and believes which is embedded in cultural factors such as ethical and moral behaviours. According to Fukuyama, trust arises when a community shares a set of moral values in such a way as to create expectations of regular and honest behaviour.

What is the impact of it?

Several studies provide evidence that societies having rich in social capital enjoy certain common benefits such as reduction in poverty and social exclusion, influence on educational performance, improvement in health care facilities and personal welfare, increase citizen participation, reducing corruption and drop in crime rate etc.

Social relationships are based on trust. Societies in which low levels of social capital have high transaction costs. Low trust societies prevent circulation of information; hamper the creation of knowledge in terms of technology and institution. Societies having low level social capital lack the effective support of reciprocal help which increase the non-supportive relationships, crime, etc. Definitely all these affects economic progress and welfare of the society.

Why social capital?

Social capital has been investigated focusing on the complementarities and interconnectedness of informal local organizations and institutions of state or/and market. At the grassroots level informal institutions like non-governmental organisations (NGO) act as developmental agents when state and market fail to or partially meet citizens' expectations and needs. In case of state or/and market failure for common property resources *ElinorOstrom*explains the diversity of solutions. In Governing the Commons, she suggests to build up institutions of self-government through which collective action might be more effective than enforcing rules imposed from external sources.

Social Capital in Economics

In usual economic sense, social capital is regarded as capital under basic assumptions – (i) creation of social capital entails a sacrifice of resources, and (ii) it is expected to generate 'a stream of benefits' in the future (Riedl and Winden 2002). Social capital characterizes a community based on the degree that its resources are socially invested, that it presents an ethos of trust, norms of reciprocity, collective action, and participation, and that it possesses inclusive, flexible and diverse networks. Social capital of a community is assessed through a combination of its *bonding* (within group relations), *bridging* (inter-community ties), and *linking* (relations with formal institutions) dimensions (Woolcock and Narayan 2000).

Social Capital as a Factor of production

Considering social capital as a productive factor, Heller (1996), Ostrom(2000) and Rose (2000) point out that social capital contributes to economic growth by facilitating collaboration between individual interests towards the achievement of increased output. Several studies (Bertrand and Mullainathan2000,Beugelsdijk and Smulders 2004, Bjornskov 2006, Glaeser et al. 2000, Alesina and Ferrara 2002, Miguel 2003, Knack et al. 1997, Sobel 2002, Tau 2003, Temple and Johson1998, etc.) have discussed about the features of social capital and its contribution to economic growth. Knack and Keefer (1997), Temple and Johnson (1998) provide the evidences that high levels of trust and social participation are positively correlated with economic growth, after controlling other growth promoting factors. Rupasingha et al (2006) identifies inputs into the production of social capital for the USA, using individual and community factors that are important determinants of social capital. Actually the repeating trustful interactions in the economy do sediment in higher levels of generalized trust, which is treated as input in the aggregate production function (Crudelia 2006). Scholars like Miguel (2003),Mogues and Carter (2005), Rupasingha et al. (2006) study the relationship between the stock of social capital and its relation to economic development, especially, low crime rates and reduction of other social problems. It should also be noted that countries/regions with relatively higher stocks of social capital, in terms of generalized trust and widespread civic engagement seem to achieve higher levels of growth, compared to societies with low trust and low civicness (Putnam et al. 1993). So, social capital contributes to economic growth by focusing the importance of trust and cooperation within firm, industry and market. Thus, social capital truly greases the wheels that allow nations to advance smoothly and creates the base for economic prosperity.

3. Formation of social capital

Following Bourdieu, Coleman and Putnam we can relate the strands of 'human capital', 'cultural capital' and 'social capital' to 'economic capital' and try to estimate their impact on the life of individuals and society, and suggest actions that might be taken by governments or organizations/institutions to foster social capital with its norms and networks towards the strengthening of effective social and civil life. Fukuyama (1995, 1997) contends that 'the area where governments probably have the greatest direct ability to generate social capital is education.' Educational institutions not only transmit human capital but also pass on social capital in the form of social rules and norms. This is true not just in school level education but in higher and professional education as well. Economy needs such social capital through investment in certain forms of behaviour and their products, which could be generated in the schooling system.

Schooling may help us to articulate what social capital might broadly mean at family, school and individual pupil level, particularly with regard to the interaction of human capital, cultural capital and social capital at each level of influence on young people. Schools offer the child contact with additional human capital in the persons of an intelligent and generally caring staff. This leads through curriculum and classroom interaction to the accumulation of cultural capital in the form of academic qualificationsand also insight or entry into a range of intellectual and social activities through an increasingly confident ability to read its semiotic codes and social norms. It should often be implicitly observed in the notion that schools impart good standards of behaviour, help to socialize young people and also enable them to engage in society by virtue of being better informed.

Within schools, *bridging social capital* might be found among cross-curricular groups; between teachers and other professionals or in class mates. *Linking social capital* concerns relationships among people with differential power and allows access to resources, ideas, information and knowledge within a community or groups. It should be mentioned that each type of social capital has some value. In this context it should be noted that children are skilled at making connections between school and the home, acting as a kind of broker for their parents. Each family adds the cultural capital of its own history and identity, its recognized 'place' within the community that has been gained, sustained or diminished over time. Close interaction between parent and child is seen as crucial to the development of social capital and a key mechanism by which the human capital of the parent is transmitted to the child (Coleman 1988). Parents can invest in some forms of social capital more directly than by building relationships.

Social capital is provided by the school through internal networks of association within the institution and also external networks which bridge to community life and work experience, while also in certain cases linking to intellectual or social contexts or challenges in locations beyond the immediate community, through projects, educational visits. Schools serve as institutional environments that favour informal associability amongst peers and fellow members. It should be noted that cooperative tendency build up social trust, which is created in the schooling system. The trust is typically involved in social capital in schools may be seen and estimated in such factors as belief in self, belief in others and belief in the world.

4. Role of Human Capital in Economic Growth

The growth of national wealth depends on its total capital which consists of physical capital, natural resources, human capital and social capital. Physical capital shares only 15-30 per cent (Hjerppe 2000); and hence, it is important to lay more emphasis on the role of human and social capital in economic growth and development, and study the interrelationships among them.The concept of human capital is truly associated with good education and strong health. Human capital is defined as the knowledge, skills, and experience of people which increase their economic productivity. Human capital is acquired through investing in education, job training, health care, etc.

Romer (1986) and Lucas (1988) develop the theoretical framework emphasizing the **role of human capital** in stimulating economic growth and popularize the literature on role of education in economic growth. Empirical studies of economic growth for a broad cross section of countries (Romer 1990a, Barro 1991, Kyriacou 1991, Benhabib and Spiegel 1992) have used proxies for human capital. A sizeable part of eeconomic literature (Nelson and Phelps 1966; Lucas 1988; Becker, Murphy and Tamura 1990; Rebelo 1992; and Mulligan and Sala-i-Martin 1992 etc.) investigates the *role of human capital in 'the form of educational attainment' in the economic growth* process. Romer, 1990; Barro, 1991; Barro and Sala-i-Martin, 1992; Mankiw et al.1992; Liu and Rivkin, 1993; etc. provide empirical findings and support that **education** contributes positively to economic growth. Lucas (1988), Romer (1986), Barro (1991), and Mankiw et al. (1992) show that education has a positive impact on economic growth, while Bloom and Canning (2005) observe that economic growth depends on human health condition and human productivity. Health and education are components of human capital and contributors to economic growth.

In the early 1960s, Schultz (1961) and Becker (1964) focus on human capital which is defined as the ‘set of knowledge, skills, competencies, and abilities embodied in individuals’ and acquired, for example, ‘through education, training, medical care and migration,’ etc. They suggest health promotion with education, which is considered as an important investment in human capital formation.; however, health affects economic growth through different development mechanics – either health conditions improve due to declining mortality, or, for given physical capital, inputs, schooling and experience, better health increases labor productivity and economic growth.

Human Health Capital

Health is an important component of individual’s welfare and standard of living. Good health is a state of physical and mental wellbeing necessary to live a meaningful and productive life. Long healthy life is the basic aspiration of human development. Hence, health has become an important indicator of human development. It is true that a healthy person is an asset for himself, for society and also for nation. To achieve ‘good health for all’ nation should promote health care services and prevent diseases. Good health promotes efficiency in workforce, enhances their skill and aptitude and is necessary for high life expectancy. Good health is absence of disease and also it represents both physical and mental capability to enjoy living. Sickness and ill- health are central issues in shaping human capabilities. So, health is an investment good that increases the future productive power of individuals and the economy. Health has a direct effect on the productivity of workers (Dinda et al. 2006). Macroeconomists’ interest in health is based on the intuition that a healthy population is likely to be more productive than a sick one (Hartwig 2010). Therefore, improving the health status of the population should foster economic growth *ceteris paribus*.

Empirical evidences suggest that productivity and wages rise with education levels and worker’s job experience. These returns are higher for healthy workers. Indirect benefit of improvements in health is that the prospective lifespan of healthier worker is longer. Health, as measured by life expectancy, has a significant effect on subsequent economic growth. Health might be one of the most robust predictors of future growth (Sala-i-Martin 1997a,b). So, health leads to economic growth, and Bloom and Canning (2000) find the mechanism through which it operates. The most obvious mechanism is through the effect of health on the productivity of workers.

Height is a good proxy for health because it is linked to health and nutritional intake in childhood and a significant indicator of adult health. Tall people have better health and live longer (Fogel 1994, 1997; Sohn 2000). However, other factors such as environment and genetic factors also affect height. Literature explains wages/salaries using height as a health indicator (Schultz 1999a,b; Schultz and Tansel1992; Ribero and Nunez 2000; and Dinda et al. 2006). Additional one centimeter of height due to health inputs provides about extra six percent of wages. This is about the same effect on wages as an extra year of schooling since the consensus is that a year of education adds about nine percent to wages (Psacharopulos 1994). Estimates of the height effect in developed countries are much smaller, about one to two percent extra wages per centimeter of height (Strauss and Thomas 1998). The wage gap reflects the increased productivity of healthy worker. There is the additional effect that ill-health may prevent workers from going to work, leading to an ever larger gap in earnings.

Bloom, Canning and Sevilla (2004) provides the evidence of the health effect on economic growth. They discuss about the labor quality in the form of human capital and its contribution to economic growth. Healthier workers are physically and mentally more energetic and more productive. They earn more wage/salary otherwise illness and disability reduce hourly wages substantially, where a higher proportion of the work force is engaged in manual labor than in industrial countries (Strauss and Thomas, 1998). Bhargava et al. (2001) pointed out that the last half of the 20th century has seen remarkable gains in health, which has certain influenced on economic growth after the World War II. Average life expectancy in developing countries was only 40 years in 1950 but had increased to 63 years by 1990 (World Bank, 1993). Human life expectancy has increased due to improved nutrition, better sanitation, innovations in medical technologies, and available public health infrastructure. The relative contribution of these factors depends on the level of economic development (Preston 1976). However, since life expectancy is strongly influenced by child mortality, low-cost interventions such as the provision of ante natal care and vaccination programs in poor countries can be effective instruments for raising life expectancy. More generally, economic development depends on the level of skills acquired by the population and on capital formation. The former is influenced by child nutrition, educational infrastructure, and households' resources, including parents' physical health and cognitive attainment (Fogel, 1994; Scrimshaw, 1996; Bhargava, 1998, 1999).

Analyses of the inter-relationships between health and economic productivity can be conducted at the individual level, at regional levels within a country, and for aggregate data on countries. In developing countries, there are numerous micro studies in biological and social sciences showing benefits of better health on productivity (Basta et al., 1979; Spurr, 1983; Bhargava, 1997; Strauss and Thomas, 1998). Quantifying the relationship between health indicators and economic productivity is more subtle in developed countries. The earnings of a large proportion of the population, however, depend on their general health and well-being, including mental health (Stronks et al., 1997).

The nexus between education, health and growth is important. Bloom and Canning (2000) point out recent economic analysis shows the significance of health conditions as a determinant of subsequent economic growth. Health-led development should focus on health investment. Spending on health has direct welfare effect and it also boost economic growth. Investing in health and education has recently constituted important social objectives because a reasonably good level of human capital increases a labour's skills, productivity and quality of life.

Literature provides the evidence that health contributes to economic growth directly (Barro, 1991; Barro and Lee, 1994; Barro and Sala-i-Martin, 1995; Sachs and Warner, 1995; Sachs and Warner, 1997; Mayer, 2001; Bloom, Canning, and Sevilla, 2004; Rivera and Currais, 2004); and indirectly through its effects on productivity (Basta, Soekirman, Karyadi, and Scrimshaw, 1979; Spurr, 1983; Bhargava, 1997; Strauss and Thomas, 1998). So, literature agrees that health is an important determinant of economic growth (Wheeler, 1980; Knowles and Owen, 1995; Knowles and Owen, 1997; Arora, 2001; Bhargava, Jamison, Lau, and Murray, 2001; Webber, 2002; Chakraborty and Das, 2005, Dinda 2006).

The growth-enhancing role of human capital accumulation has been recognized since Solow's (1956, 1957) model of economic growth has been 'augmented' by human capital. The pioneering empirical studies by Barro (1991) and Mankiw et al. (1992) focused on the educational dimension of human capital, yet it has been known for long that human capital can also be accumulated by improving the health status of the population (Schultz, 1961; Mushkin, 1962). Weil's (2007) affirmed the growth-enhancing role of health capital formation empirically. The effect of health on GDP is positive and strong among poor countries (Weil 2007, 2005) while it is mixed in rich countries. Heshmati (2001) and Rivera and Currais (1999a, 1999b, 2003, 2004) find a positive effect of health expenditure growth on productivity growth for OECD countries, however, life expectancy is not acceptable as a significant explanatory variable for productivity growth in high-income countries (Knowles and Owen 1995, 1997; and McDonald and Roberts 2002). Bhargava et al. (2001) even find a negative effect of the adult survival rateon economic growth for the US, France, and Switzerland. Acemoglu and Johnson (2007) reach a similar conclusion. Barro (1996) investigates the interaction between health and fertility as another channel through which health affects output and its growth rate. Acemoglu and Johnson (2006) examine the relationship between life expectancy and per capita income and Hassan and Cooray (2012) summarize a few influential studies on this issue. They observe that many studies use life expectancy to measure health capital (Bloom et al. 1998, 2000) while few studies use survival rates (Bhargava et al. 2001, Weil 2007).

Mortality affects growth by diminishing incentives for behavior with short run costs and long run pay-offs. The basic logic of mortality effect on investment is the reduction of survival probability like a reduction in the discount factor which brings lower saving and investment and thus lower growth. A similar process is used to determine human capital accumulation. Parents with altruistic feeling towards their children will benefit indirectly from physical capital investments, an early death destroy human capital investments before their full returns are realized. After all, mortality might also affect growth through mortality rates. However, high rate of population growth reduces the capital-labour ratio which limits economic growth. Thus, we have to consider the direct relationship between health, channels of investment (schooling and fertility or health care) and economic growth. Considering adult survival rates, age, and adult height, Weil (2007) observes that health affects GDP per capita particularly in the less developed countries. So, health is one determinant of economic growth (Bloom *et al.* 2004).

Truly, human capital has several dimensions – one is education or knowledge capital that generates through schooling, another is health capital which is created in the household level, while both improves with social institutions or/and social relations. Most of the economic growth literature mainly discusses human capital focusing on education and health and least on development of human capital highlighting social relations or social capital.

5. Interrelationships between Social and human Capital and Growth

Social Capital and Health

People, with good network, enjoy better mental and physical health. The health enhancing effects of relationships have been documented in a lot of studies, reducing from reduced risk of serious illnesses, those with solid support networks recover faster, compared with others who are isolated or alone. People with good network probably may live longer. Link between networks and longevity appears to be caused by behavioural change. For example, more social contacts improve health through reducing smoking, alcohol etc.

There are social risk factors which may affect individual's health status (Kritsotakis and Gamarnikow 2004). These social risk factors are some time long run difficulties like unhealthy physical environment, poverty, and a high level of insecurity and negative events such as loss of a partner, unemployment, forced migration, natural disasters, and so on. Social capital may be able to reduce or limit such negative events. In this context, Loury's view about social capital is pertinent: 'the set of resources that inhere in family relations and in community social organizations' and that are useful for the cognitive or the social development of a child or young person. Loury (1977) suggests that social capital is the total of social elements, which are required for the development of human capital. Bolin et al. (2003) observe positive effect of social capital on health capital while Kennelly et al. (2003) contradict it.

Recently several studies (Moore et al. 2006; short 2004; Mladovsky and Mossialos 2008; Costa-i-Font and Mladovsky 2008) have focused on *role of social capital in the understanding the production of health human capital*. However, the mechanism of the social capital influencing the health related behavior and use of health care is unknown (Scheffler 2008). Laporte et al. (2008) reportedindividual and community level effects of social capital on health care. Folland(2008) indicates causal link between health and social capital and it highlights the concept of self-valuation of life. Jusot et al. (2008) observe an association between psychosocial resources and self-assessed health. Health economics literature suggests that social capital improves individual's health using choice of health care (Puhl and Brownell 2001) or/and preferences (Akerlof and Kranton 1999), reducing bad habits like smoking and alcohol consumption (Folland 2008, Huisman et al. 2005), crime (Wilkinson et al. 1998), obesity (Costa-i-Font and Gil 2004), etc.; Socially formed risk perception also improve health (Caplan 2000).

Actually people infer truth from behavior of others (Ellison and Fudenberg 1993). This social dependence has been examined using spatial dependency models with spatial econometric techniques (Case 1991, Costa-i-Font and Moscone 2008). A change of an agent's action might affect his own health along with that of otherthrough social influence (Glaeser et al. 2003, Cultler and Glaeser 2006). Manski (1993) attempted to identify the channels through which society affects individual agents. In the context of incorporating endogenous effects in econometric model Manski (1993) observed the 'reflection problem', where aggregate behavior simultaneously determines and is determined by individual behavior (Costa-i-Font and Mladovsky 2008).

Individual's social environment also matters in the health-related preference formation (Costa-i-Font and Mladovsky 2008). Bisin and Verdier (2000) observe that cultural transformations influence individual's preferences for health and health care.

Health economics literature studies the impact of income, poverty, and social policies on health (Black 1980, Bell and Reich 1988, Basch 1990, World Bank 1993).Mortality rate is correlated to income inequality in each society rather than per capita economic growth (Wilkinson 1994, Kennedy, Kawachi and Prothrow-Stith 1996; Lynch et al. 1998). Better health outcome is positively associated with income level and also with income distribution within society. The distribution of income among members of society matters for their health and well-being or/and standard of living (Kawachi, Kennedy and Wilkinson 1999). Kawachi, Kennedy, Lochner and Prothrow-Stith (1997) use social capital as an explanation for the effects of income inequality on health.Using measures of civic trust (trust of others), reciprocity (helpfulness of others) and civic engagement (membership in group) Kawachi, Kennedy and Glass (1998) expand it.

Lynch et al. (2000) are critical current social capital studies. Lochner et al. (1999) overview different measures of social capital, however, it is difficult to measure and interpret social capital as a single explanatory variable (Kawachi et al. 1999a; kawachi and Berkman 2000; Kennedy et al. 1998).

Human Capital develops Social Capital

Development of human capital creates the base for social capital formation such as social norms, trust, cooperation, networks etc that forms in the schooling system. Education's longstanding concern with association makes direct and indirect contribution to the development of social networks[5], trust, tolerance and reciprocity. Educated individuals are interested in dialogue and conversation, and develop cultural environment in which people can work in coordination and trust each other. So, improvement of schooling system creates the platform for interaction between individuals[6], groups and sub groups. Interaction enables people to commit themselves to each other, and thereby to knit the social fabric. Social capital of an economy definitely depends on the available stock of human capital (that is

[5]Educational achievement is likely to rise significantly, and the quality of day-to-day interaction is likely to be enhanced by a much greater emphasis on the cultivation of extracurricula activity involving groups and teams. Thus, encouraging the development of associational life can also make a significant difference to the experience of being in different communities.

[6]In other word, human capital is capable to create and develop norms, regulations, and social networks that form the social capital, and thereby economic growth and development (Temple and Johnson (1998)).

definitely greater than one, because, at least two individuals are required to form social capital). So, social capital formation is a function of human capital.

In the 1960s, neo-classical economists such as T.W. Schultz and Gary Becker introduced the notion of human capital, arguing that a society's endowment of educated, trained, and healthy workers determined how productively the orthodox factors could be utilized. The latest equipment and most innovative ideas in the hands or mind of the brightest, fittest person, however, will amount to little unless that person also has access to others to inform, correct, assist with, and disseminate their work. Life at home, in the boardroom, or on the shop floor is both more rewarding and productive when suppliers, colleagues, and clients alike are able to combine their particular skills and resources in a spirit of trust, cooperation, and commitment to common objectives. The vast majority of people, moreover, live, work, vote, pray, and recreate as members of various but distinct social groups that shape one's very identity and values.

6. Critical Review

The concept of social capital is multidimensional and it has modified and widens to cover several relationships at individual, group, institutional and state level analysis that the term has lost all heuristic value (Woolcock 1998). Its strength lies in its ability to mobilize diverse interests in a common dialogue. Social capital is an intangible item that is easier to destroy than produce.

Due to the changes in production methods immaterial factors of production, namely the role played by human and social capital in economy have been emphasized in the recent years. However, Solow (1995, 2000) and Sobel (2002) criticize the concept of social capital as a factor of production. Truly economic (physical) capital is immediately convertible into money and may be institutionalized in the form of property rights. Social capital, made up of social obligations ("connections"), which is also convertible, under certain conditions, into economic capital and may be institutionalized in the form of a title of nobility (McGonigal et al. 2005) or goodwill.

Most important feature of social capital is the symbolism of capital as an economic metaphor. Social capital is 'a form of power, a currency, a resource: it can be utilized, traded, exchanged, invested or cashed' (McGonigal et al. 2005). Social capital concerns relationships among people with differential power and allows access to resources[7], ideas, information and

[7]Social capital can also be exploited (McGonigal et al. 2005).

knowledge within a community or groups. Social capital is a form of energy, a force; it is a capacity, a facility that can, deploy and activated towards some desired goal. Thus, social capital is purposeful; a means toward other ends (McGonigal et al. 2005).

There has been a great deal of scepticism towards 'social capital' for using the concept of capital among certain prominent representatives of the discipline of economics (Solow (1997 and 2000; Arrow 2000; Dasgupta 2000 and Sobel 2002). However, other leading economists have accepted the concept, incorporated it into economic[8] terminology, and attempted to measure it and evaluate its importance (Knack and Keefer 1997, Knack 1999, Cooke and Wills 1999, Glaeser et al. 2000, Temple 1999, Ruasingha et al. 2006, Dinda 2008, etc.).

Now if it is capital then it exists either at micro or macro level. Coleman and Bourdieu are closer to the micro level and Putnam is closer to the macro level in their scale of analysis. Few scholars like Fine (2001) placed it in the mid-range, the meso level. Truly, the journey from Bourdieu and Coleman to Putnam is the micro foundation for macroeconomics performance.

Mostly social capital generates benefits for society as a whole, however, social capital has also negative effects, some of which are the drug trafficking, organized terrorist networks or mafia etc.

Prominent critics claim that important elements of social capital, like trust, accrue as a by-product of social interaction and that the arising reward is intrinsic to the interaction itself (Arrow, 1999). While admitting that trust, trustworthiness, capacity and disposition to cooperation are valuable and important for the proper functioning of societies in the small and the large these critics doubt that there is any instrumental value incorporated in social capital (Solow, 1999). In contrast, scholars of social capital theory state that the premise behind the notion of social capital, namely that people deliberately invest in social relationships in the hope and anticipation of beneficial returns is generally fulfilled (Coleman, 1988; Lin, 2001).

7. Conclusion

This study reviews the progress of concept of social capital and highlights its features focusing on its originand explains the association between social capital and economic growth through development of human knowledge and health capital. This chapter reviews

[8]From a theoretical point of view Becker (1996) has treated social capital as a variable where the utility for the individual is concerned.

the basic relational dynamics between human and social capital both affects economic growth, and also provides avenues through which social capital drives economic growth.

Social capital is a broad term containing the social norms and networks that generate shared understandings, trust and reciprocity, which underpin co-operation and collective action for mutual benefits, and creates the base for economic growth and development. Human capital improves with schooling which widens social networks and economic development. Social capital is generated and accumulated when people interact in a purposeful manner with each other in formal and informal meeting places. Educated individuals are interested in dialogue and conversation that enables people to build communities, to commit themselves to each other, and thereby to knit the social fabric. Social capital formation might be a desirable objective for policy–making[9]. Policy maker should aim to develop social norms, regulations, trust and cooperation with related ideas of social inclusion or school improvement through development of human capital that could be created from productive consumption (Steger 2002, Dinda 2008). Development of human capital actually creates the base for social capital, which leads towards inclusive growth modelling while it is considered as externality of human capital in Lucas (1988). In Lucas (1988), human capital is found to have positive external effect on aggregate production function. The literature on finding education externalities has been revived in recent years, partly in the light of the new fashionable idea of social capital.

Literature finds that the quantity and quality of interactions provide social capital which affects all dimensions of human capital including health. Social capital affects health through collective resources provided by networks, individual and collective consequences of social norms. Family, friends, associations etc. provide a moral support to fight against feelings of vulnerability or insecurity in daily life while the mobilization of material resources through networks allows a faster return to the initial situation (Poder and HE 2010). Health of individuals should be benefited from a greater efficiency of the health system and also from an increase in the budget of the health system resulting from a greater economic growth.

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[9] Putnam's view seems to regard association between people as positive in its own right. Coleman's perspective emphasizes the use of social capital as a precursor of human capital. Bourdieu and Coleman agree that the notion of social capital can be converted into other forms of capital.

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